RESEARCH SERVICE

issued by the
Research Department

THE BOARD OF EDUCATION FOR THE CITY OF TORONTO

ISSN 0316-8786
ISBN 0-88881-179-0

THE RETENTION AND CREDIT ACCUMULATION OF STUDENTS IN SECONDARY SCHOOL

A FOLLOW-UP FROM THE 1980 GRADE NINE STUDENT SURVEY

E. N. WRIGHT

#176

MAY, 1985

ACKNOWLEDGMENTS

The author wishes to acknowledge the assistance of the Computer Services Department and its staff, including Avtar Dhanota and Sid Burney, who assisted in organizing and structuring the data so that it could be easily analyzed, and also Deborah McFarlen for typing the text and organizing and preparing the tables.

TABLE OF CONTENTS

INTRODUCTION 1

SUBJECTS AND DATA 2

RESULTS 5

- Feeder Schools 13
- Immigrant Students 16
- Family Structure 19
- Race 25
- Occupations 28

SUMMARY 35

APPENDIX A 40

APPENDIX B 42

REFERENCES 43

INTRODUCTION

As the Student Information System was implemented, possibilities for tracking students increased. The trustees were interested in obtaining such longitudinal data and asked for a report on how such tracking might be undertaken. After studying the report the trustees recommended that "the tracking of students in the Grade Nine Student Survey proceed as outlined in the report" (Minutes of the Board, p.485, 1983). The analyses which are reported below have been undertaken to implement that recommendation.

SUBJECTS AND DATA

The year 1984 presented an opportunity to look at the progress of the students who were in Grade Nine in 1980, the students who had been studied in the first annual Grade Nine Student Survey (Wright and Dhanota, 1981). By the Fall of 1984, these students had had an opportunity to attend school for four years, and to collect 27 credits which is the number required to obtain a Secondary School Graduation Diploma (S.S.G.D.).

With the assistance of the Computer Services department, the current student files were accessed to provide information on all the I.D. numbers of those 1980 Grade Nine students as of October 31, 1984. These current files indicated whether or not the student was still in attendance at a Toronto school. If the student was no longer in attendance, the date of termination, and in some cases the destination, was noted. For all students, the number of credits accumulated at the Advanced, General or Basic levels was recorded and their total number of credits was also calculated.

In this report missing data affects the numbers separately for each table. For this reason the tables in this report, although very close to, do not exactly match the 1980 numbers. For the interested reader these matters are discussed further in Appendix A.

When a student leaves the Toronto school system the date is recorded. Where known, a reason and destination is recorded. However, the information is too limited to use for our analyses.

We know that the terminations include many students who left school to enter the work force as well as some who transferred to schools outside the Board's jurisdiction. The information on destination is summarized in Appendix B. For the purposes of this report, however, the time of termination provides a reasonable basis on which to make some comparisons among various groups. We have thus reported the number of students who left during the first year, second year, etc. A grade 9 student who left before the end of May 1981 is recorded as having left during Year 1. A student who left before the end of May 1982 is recorded as having left during Year 2,, and so on. Any student who did not terminate until June 1984 or later is listed as having terminated after Year 4. The remaining students, who were still attending school are reported as still enrolled in fifth year.

The next stage in the analysis was to combine those students who had completed four years of study as well as those who were still studying. These students had had a chance to earn 27 credits and their S.S.G.D. (Secondary School Graduation Diploma). It is then possible to compare subgroups to see on the average how many credits they earned and at what level. Certainly there will be a selective characteristic at play, and it can be argued that the better students are least likely to terminate. This would imply that the greater the number of terminations, the more likely that one had lost the less able students from that sub group. However, some of the weaker students will be staying on for a fifth year of study because they had fewer than 27 credits

at the end of four years. Obviously there are many individual variations not addressed in such a general analysis. However, these statistics do provide an opportunity to see whether the general patterns of relationship between background variables and school success found in the Grade Nine Survey continue to be present in this follow-up data.

RESULTS

Tables 1 and 2 summarize the data for this population in the format that will be used for all the tables. Table 1 reports the number of students who terminated after less than one, two, three, and four years of study. The table has the data subdivided by the level at which the student in Grade 9 reported he/she was taking most of his/her courses. (In 1980 the levels of study were described by numbers; these have been converted to present usage.) It is very clear that students taking Advanced level studies are the least likely to terminate at every year of study. Conversely for the first two years of study the students taking Basic level courses are the most likely to terminate. This is most pronounced for students who have terminated during Year 2 (this is the time when many of them will have reached their 16th birthday and can legally leave school.)

In Table 1, the information is presented, XXX in parenthesis, in a different form. This table shows the percentage remaining at the end of each year of study. Of interest is the column of Totals which shows that 67.63% of the initial Grade 9 population has continued to the completion of four, or more, years of study.

Table 2(a) takes the group of students who have completed at least four years of study and examines the average number of credits that they have earned. Again, this is subdivided by whether or not the student initially reported taking credits primarily at the Basic, General or Advanced level of study.

TABLE 1

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY INITIAL LEVEL AT WHICH THEY REPORTED TAKING MOST OF THEIR CREDITS

	Initial Reported Level of Study**							
	Basic		General		Advanced		TOTAL	
Time of Termination	No.	Percent	No.	Percent	No.	Percent	No.	Percent
During Year 1	58	4.50%	82	4.28%	76	2.09%	216	3.16%
Percent retained:		(95.50%)		(95.72%)		(97.91%)		(96.84%)
During Year 2	243	18.87%	212	11.05%	239	6.57%	694	10.14%
Percent retained:		(76.63%)		(84.67%)		(91.35%)		(86.71%)
During Year 3	178	13.82%	222	11.57%	212	5.82%	612	8.94%
Percent retained:		(62.81%)		(72.10%)		(85.52%)		(77.77%)
During Year 4	163	12.66%	266	13.87%	265	7.28%	694	10.14%
Percent retained:		(50.15%)		(59.22%)		(78.24%)		(67.63%)
After Year 4	360	27.95%	543	28.31%	482	13.24%	1385	20.23%
Still Enrolled in 5th year	286	22.20%	593	30.92%	2366	65.00%	3245	47.40%
TOTAL *	1288	100.00%	1918	100.00%	3640	100.00%	6846	100.01%

* - Percentages may not be exactly 100%, because of decimal rounding.

** - In 1980 levels of study were described by numbers; these have been converted to present terminology.

TABLE 2(a)

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY INITIAL LEVEL AT WHICH STUDENTS REPORTED TAKING MOST OF THEIR COURSES

Type of Credit	Initial Reported Level of Study**		
	Basic	General	Advanced
Basic Level Credits	20.88	0.75	0.04
General Level Credits	2.17	17.33	2.03
Advanced Level Credits	0.50	5.02	25.11
TOTAL CREDITS	23.79	23.99	27.39
NUMBER OF STUDENTS	646	1136	2848

** - In 1980 levels of study were described by numbers; these have been converted to present terminology.

In the early part of 1980, there were still some circumstances in which a few schools offered credits at a common level, that is to say, they were neither Basic, General, nor Advanced. This situation no longer exists. However, one will see that because of the common credits, the total number of credits reported in the tables is slightly greater than the total of the Basic, General and Advanced credits.

In Table 2(a) we see that students taking credits at the Basic and General levels have amassed almost identical amounts of credits, whereas those working at the Advanced level have amassed, on the average, about 3 1/3 more credits. As would be expected, students who initially reported studying at the Basic level have accumulated primarily Basic level credits; those who initially reported studying at the General level have amassed primarily General level credits, although it must be noted that on the average over 1/5 of their credits have been at the Advanced level. Students studying primarily at the Advanced level have, on the average, picked up a few courses at the General level.

Some further observations about these averages are in order. Since this report is in reality a collection of six thousand plus case histories, we have to recognize that the average hides a variety of ways in which credits were accumulated. Some students have only courses at one level of difficulty; others have a mixture of levels among their credits. The total number of credits earned also varies greatly among the students. To give some sense of this variation, Table 2(b) was prepared. At the

TABLE 2(b)

NUMBER OF CREDITS EARNED BY STUDENTS
WHO HAVE COMPLETED 4 YEARS OF STUDY,
(EXPRESSED AS A PERCENTAGE)
TAKING MOST OF THEIR COURSES

Number of Credits	Initial Reported Level of Study**		
	Basic	General	Advanced
20 or less	25.54%	26.06%	11.10%
21 - 26	19.97%	22.98%	15.90%
27 - 30	38.55%	32.57%	40.00%
31 or more	15.94%	18.57%	33.01%
NUMBER OF STUDENTS	646	1136	2848

** - In 1980 levels of study were described by numbers; these have been converted to present terminology.

end of four years, 54.6% of the students who began their studies at the Basic level and 51.0% of those who started with General level courses have the 27 or more credits necessary for an S.S.G.D. (Secondary School Graduation Diploma). There is, however, more variation in the latter group who have a slightly larger percentage of students with 31 or more credits, although their averages are very similar (23.79 and 23.99). Students who were taking credits at the Advanced level had 73% with 27 or more credits (their average was 27.39). The remaining tables present the data in the format used for Tables 1 and 2(a) in order to keep a consistent, easily comparable format.

Tables 3 and 4 look at differences between male and female students. The Grade Nine Survey (Wright & Dhanota, 1980) showed that there were more females than males taking courses primarily at the Advanced level, and this is reflected in the data in Tables 3 and 4. Table 3 contains an interesting anomoly: for the first three years of study, females are slightly less likely to terminate than males. After four years of study, however, 22.28% of the females terminate, compared to 18.49% of the males. Consequently there are slightly more males than females continuing to study in their fifth year.

When we look at the number of credits accumulated by those students who completed at least 4 years of study, we see that the females have more total credits, more Advanced level credits and fewer General level credits and Basic level credits. This is consistent with the previous finding that there were proportionately more females than males taking Advanced level

TABLE 3

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY SEX

Time of Termination	Sex				TOTAL	
	Female		Male			
	No.	%	No.	%	No.	%
During Year 1	95	(2.93%)	121	(3.38%)	216	(3.16%)
During Year 2	306	(9.43%)	388	(10.84%)	694	(10.14%)
During Year 3	289	(8.91%)	323	(9.02%)	612	(8.94%)
During Year 4	337	(10.08%)	367	(10.25%)	694	(10.14%)
After Year 4	723	(22.28%)	662	(18.49%)	1385	(20.23%)
Still Enrolled in 5th year	1505	(46.38%)	1719	(48.02%)	3245	(47.40%)
TOTAL *	3245	(100.01%)	3580	(100.00%)	6846	(100.01%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 4

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY SEX

Type of Credit	Sex	
	Female	Male
Basic Level Credits	2.97	3.39
General Level Credits	5.15	6.48
Advanced Level Credits	18.62	15.14
TOTAL CREDITS	26.90	25.50
NUMBER OF STUDENTS	2228	2381

courses and suggests the possibility that a larger number of males than females were taking the fifth year because they had failed to accumulate 27 credits.

Feeder Schools

The Grade Nine study had shown that students entering secondary school from the separate Schools are less likely to be studying at the Advanced level than students entering our high schools from Toronto public schools. The data in Table 5 shows that, compared to students from the public schools, fewer students who were in separate schools are still attending a Toronto secondary school five years later, and that a larger percentage have terminated during each year of study. The difference is greatest during the second year of study, with 13.62% of the separate school students terminating then, compared to 8.27% of the public school students. As noted earlier, it is at this time that many of the students will have reached their 16th birthday. In Table 6 we can see the total number of credits that have been earned by these students and on the average students who attended a public school only have half a credit more than those who attended a separate school. However, on the average, students who attended a separate school are accumulating more Basic level and General level credits and fewer Advanced level credits than those who attended a public school.

TABLE 5

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY WHETHER THEY ATTENDED A TORONTO PUBLIC SCHOOL OR A SEPARATE SCHOOL IN 1979-80

	Elementary School Attended			
	Public		Separate	
Time of Termination	No.	%	No.	%
During Year 1	113	(2.49%)	27	(3.57%)
During Year 2	375	(8.27%)	103	(13.62%)
During Year 3	328	(7.23%)	75	(9.92%)
During Year 4	365	(8.05%)	76	(10.05%)
After Year 4	909	(20.05%)	202	(26.72%)
Still Enrolled in 5th year	2444	(53.90%)	273	(36.11%)
TOTAL *	4534	(99.99%)	756	(99.99%)

* - Percentages may not be exactly 100%, because of decimal rounding.

NOTE: Separate school students taking academic programs are likely to stay in the separate school system for their secondary education.

TABLE 6

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY WHETHER THEY ATTENDED A TORONTO PUBLIC SCHOOL OR A SEPARATE SCHOOL THE PREVIOUS YEAR

Type of Credit	Elementary School Attended	
	Public	Separate
Basic Level Credits	2.98	3.92
General Level Credits	5.40	9.72
Advanced Level Credits	18.12	12.08
TOTAL CREDITS	26.80	26.27
NUMBER OF STUDENTS	3353	475

Immigrant Students

Students who were not born in Canada are considered in two groups, based on their first language. The first group of students (Tables 7 and 8) are those who have a first language other than English or French. The second group are those with only English and/or French as first languages. Within the tables the students are further categorized by year of arrival. The students we are looking at were in Grade 9 in 1980. The first group arrived in 1977 or later and had been in Canada about three and a half years or less. Those who arrived from 1973 to 1976 had been in the country from three and a half to seven and a half years. The third group had been in Canada seven and a half to ten and a half years. The remaining students had arrived over ten and a half years earlier. The data for these different groups show some quite different patterns.

Table 7 examines the immigrant students who had a first language other than English or French. The most recent arrivals (after 1976) were the most likely to terminate during the first three years. Although the pattern is not sharp, the group arriving in 1970 - 1972 is somewhat different from the other groups. Its pattern of terminations leaves it with the largest proportion still remaining after more than four years of study. These variations are only partly reflected in Table 8. Looking at students who spent four or more years in the secondary schools, the more recently arrived have, on the average, fewer credits at every level of study. The variations among the other

TABLE 7

NUMBER OF IMMIGRANT STUDENTS
WHO HAD A FIRST LANGUAGE
OTHER THAN ENGLISH OR FRENCH
AND WHO TERMINATED EACH YEAR,
ANALYZED BY RECENCY OF ARRIVAL

Time of Termination	Arrived After 1976		Arrived 1973-76		Arrived 1970-72		Arrived Before 1970	
	No.	%	No.	%	No.	%	No.	%
During Year 1	40	(7.58%)	18	(3.82%)	14	(4.61%)	11	(3.19%)
During Year 2	77	(14.58%)	57	(12.10%)	27	(8.88%)	48	(13.91%)
During Year 3	86	(16.29%)	38	(8.07%)	32	(10.53%)	24	(6.96%)
During Year 4	75	(14.20%)	45	(9.55%)	29	(9.54%)	38	(11.01%)
After Year 4	69	(13.07%)	121	(25.69%)	58	(19.08%)	88	(25.51%)
Still Enrolled in 5th year	181	(34.28%)	192	(40.76%)	144	(47.37%)	136	(39.42%)
TOTAL *	528	(100.00%)	471	(99.99%)	304	(100.01%)	345	(100.00%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 8

AVERAGE NUMBER OF CREDITS EARNED BY IMMIGRANT STUDENTS WHO HAD A FIRST LANGUAGE OTHER THAN ENGLISH OR FRENCH AND WHO HAD STUDIED AT LEAST 4 YEARS, ANALYZED BY RECENCY OF ARRIVAL

Type of Credit	Arrived After 1976	Arrived 1973-76	Arrived 1970-72	Arrived Before 1970
Basic Level Credits	2.52	4.70	3.92	5.09
General Level Credits	4.76	6.60	5.90	5.97
Advanced Level Credits	13.01	15.77	16.82	15.26
TOTAL CREDITS	22.18	27.68	27.07	26.84
NUMBER OF STUDENTS	250	313	202	224

three groups is less clear; those who arrive as young children seem to be doing least well, with fewer total credits than the other two groups, these differences are, however, modest.

Tables 9 and 10 consider immigrants who report only English and/or French as a first language. This includes students from Great Britain, the United States and the Caribbean - quite a varied group. The ones most recently arrived are least likely to be still studying, and the ones who arrived before 1970 (as babies and little children) are most likely to be still attending school (see Table 9). In Table 10 we see that the most recently arrived students have the least number of credits and the least number of Advanced level credits. Those who were youngest on arrival have the most number of Advanced level credits but average one less total credits (Table 10).

Thus, recent immigrants, whether or not English/French in their mother tongue, tend to terminate sooner, and even if they do stay four years, collect fewer credits. For those who immigrated earlier, age of arrival seems not to play as strong a role in number of years studied and credit accumulation.

Family Structure

The data on family structure is organized by whether the student was living with both parents in Grade 9 or living with mother only, father only, a guardian, in a group home, or was independent (Table 11). The likelihood of students from these various groups continuing to study from year to year varies

TABLE 9

NUMBER OF IMMIGRANT STUDENTS
WHO HAD ONLY ENGLISH AND/OR FRENCH
AS A FIRST LANGUAGE
AND WHO TERMINATED EACH YEAR,
SECONDARY SCHOOL FROM YEAR TO YEAR
ANALYZED BY RECENCY OF ARRIVAL

Time of Termination	Arrived After 1976		Arrived 1973-76		Arrived 1970-72		Arrived Before 1970	
	No.	%	No.	%	No.	%	No.	%
During Year 1	8	(5.13%)	10	(2.79%)	3	(2.16%)	7	(3.98%)
During Year 2	25	(16.03%)	36	(10.03%)	14	(10.07%)	19	(10.80%)
During Year 3	10	(6.41%)	31	(8.64%)	13	(9.35%)	9	(5.11%)
During Year 4	19	(12.18%)	38	(10.58%)	16	(11.51%)	20	(11.36%)
After Year 4	33	(21.15%)	82	(22.84%)	27	(19.42%)	28	(15.91%)
Still Enrolled in 5th year	61	(39.10%)	162	(45.13%)	66	(47.48%)	93	(52.84%)
TOTAL *	156	(100.00%)	359	(100.01%)	139	(99.99%)	176	(100.00%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 10

AVERAGE NUMBER OF CREDITS EARNED BY IMMIGRANT STUDENTS WHO HAD ONLY ENGLISH AND/OR FRENCH AS A FIRST LANGUAGE AND WHO HAD STUDIED AT LEAST 4 YEARS, ANALYZED BY RECENCY OF ARRIVAL

Type of Credit	Arrived After 1976	Arrived 1073-76	Arrived 1970-72	Arrived Before 1970
Basic Level Credits	4.31	5.24	6.68	2.25
General Level Credits	7.74	6.94	5.94	4.63
Advanced Level Credits	11.35	13.09	17.41	18.13
TOTAL CREDITS	24.38	25.77	26.37	25.23
NUMBER OF STUDENTS	94	244	93	121

TABLE 11

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY FAMILY STRUCTURE

Time of Termination	Family Structure					
	Both Parents	Mother Only	Father Only	Guardian	Group Home	Independent
During Year 1	112 (2.17%)	55 (4.45%)	14 (6.54%)	27 (11.59%)	6 (9.52%)	11 (26.19%)
During Year 2	473 (9.16%)	144 (11.65%)	38 (17.76%)	42 (18.03%)	14 (22.22%)	11 (26.19%)
During Year 3	420 (8.13%)	127 (10.28%)	29 (13.55%)	37 (15.88%)	10 (15.87%)	11 (26.19%)
During Year 4	475 (9.20%)	159 (12.86%)	34 (15.89%)	31 (13.30%)	7 (11.11%)	1 (2.38%)
After 4 Years	1133 (21.94%)	210 (16.99%)	28 (13.08%)	28 (12.02%)	6 (9.52%)	1 (2.38%)
Still Enrolled in 5th year	2551 (49.40%)	541 (43.77%)	71 (33.18%)	68 (29.18%)	20 (31.75%)	7 (16.67%)
TOTAL *	5164 (100.00%)	1236 (100.00%)	214 (100.00%)	233 (100.00%)	63 (99.99%)	42 (100.00%)

* - Percentages may not be exactly 100%, because of decimal rounding.

tremendously. Those most likely to continue for four or more years of study come from homes where both parents are present. At the end of year 1, 2 or 3, students coming from homes with a mother only are somewhat more likely to terminate. The tendency to terminate is even greater for the student in a home with a father only. Yet larger proportions of students living with a guardian, in a group home, or who are independent terminate in the first three years. It appears that after age 16, that is during the second year of study is a critical time of leaving for many in group homes. Virtually none of the independent students stay beyond two years.

When we look at Table 12 at the average number of credits which these students accumulate, we see that students living with both parents are likely to have accumulated an average of three more credits than any of the other groups of students at the end of 4 years. Fewer of these credits will be at the Basic level than if the student lives with mother only or father only. The independent students who have stayed four or more years have accumulated few credits, and half of them are at the General level. The students living with guardians have also accumulated credits somewhat more slowly than the others. The students who came from group homes are least likely to have been accumulating credits at the General level. However, among the three groups, mother only, father only, and group home, the total number of credits accumulated by those who did not terminate before the end of year four is very similar. The total number accumulated by those living with a guardian is, on the average, a little less.

TABLE 12

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY FAMILY STRUCTURE

	Family Structure					
Type of Credit	Both Parents	Mother Only	Father Only	Guardian	Group Home	Independent
Basic Level Credits	2.97	4.16	3.38	1.74	4.77	1.50
General Level Credits	5.99	5.38	5.02	5.76	2.42	6.25
Advanced Level Credits	17.38	13.52	14.42	12.57	15.50	4.88
TOTAL CREDITS	26.71	23.32	23.11	21.58	23.54	12.75
NUMBER OF STUDENTS	3684	751	99	96	26	8

Race

When the data is analyzed by student's race, the data follows a different pattern than we have seen (see Table 13). Those who report that they are White are more likely to terminate within the first three years of study than those who report that they are Black. Native Canadian students are the most likely to terminate before completing four years of study. Students who identify themselves as Black or Asian are the least likely to terminate during the first four years. The Black students, however, are more likely to have terminated after four years of study, while Asians are more likely to be studying after four years. The proportion of terminations during the first three years for the South Asian students are slightly greater than for the White students. The pattern, however, is very different when we look at the number of credits accumulated during those years (Table 14). For those students who have completed at least 4 years of study, we find the South Asians likely to have the greatest number of credits, followed closely by the Asians. The White and Native Canadian students have the same average number of credits, while the Black students average 1 1/2 fewer credits. The Black students are likely to have twice as many Basic level credits as the White students; the Asian and the South Asian students have more Advanced level credits than any of the other groups. These apparently confounding findings can actually be better understood by reconsidering Table 1. Here we find that students whose initial level of study is Basic are more likely to

TABLE 13

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY RACE

Time of Termination	Race					
	Black	White	Native Canadian	Asian	South Asian	Other
During Year 1	15 (3.17%)	153 (2.97%)	3 (6.38%)	40 (4.70%)	6 (4.48%)	11 (3.64%)
During Year 2	42 (8.88%)	557 (10.81%)	5 (10.64%)	72 (8.46%)	12 (8.96%)	33 (10.93%)
During Year 3	33 (6.98%)	499 (9.69%)	5 (10.64%)	64 (7.52%)	14 (10.45%)	21 (6.95%)
During Year 4	48 (10.15%)	535 (10.39%)	5 (10.64%)	72 (8.46%)	16 (11.94%)	31 (10.26%)
After Year 4	101 (21.35%)	1115 (21.65%)	14 (29.79%)	97 (11.40%)	18 (13.43%)	54 (17.88%)
Still Enrolled in 5th year	234 (49.47%)	2292 (44.50%)	15 (31.91%)	506 (59.46%)	68 (50.75%)	152 (50.33%)
TOTAL *	473 (100.00%)	5151 (100.01%)	47 (100.00%)	851 (100.00%)	134 (100.01%)	302 (99.99%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 14

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY RACE

	Race					
Type of Credit	Black	White	Native Canadian	Asian	South Asian	Other
Basic Level Credits	6.36	3.29	4.48	0.67	4.43	1.97
General Level Credits	7.00	6.14	7.28	3.58	3.03	5.54
Advanced Level Credits	10.27	16.22	13.59	21.58	19.02	18.68
TOTAL CREDITS	24.07	25.52	25.52	26.64	27.10	26.81
NUMBER OF STUDENTS	335	3407	29	603	86	206

terminate in the first four years than students studying at the General or Advanced levels. The danger lies in assuming that these phenomena exist equally for all groups of students when they do not. Obviously even though the Grade 9 Survey showed that many Black students were enrolled in Basic level courses, this group did continue their studies. They did not terminate early, or at least no earlier than many other students. However, since many of them were studying at the Basic level, we find their average credit accumulation is higher at the Basic level than other groups of students. What this means by implication is that Black students who are studying courses primarily at the Basic level are much less likely to terminate than White students.

Occupations

In Grade 9, the students reported their parents' occupations. The analysis for these tables is somewhat simplified from the analysis used in the Grade Nine Student Survey. In Tables 15 and 16, we have the data analyzed by father's occupation, regardless of family structure. Likewise, Tables 17 and 18 analyze the data by mother's occupation, regardless of whether the mother was a single parent or not. The categories of 2 through 6 move from occupations which include the unskilled and semi-skilled to occupations which include managerial and professional occupations. The first category, "not employed" includes students, people on disability,

TABLE 15

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY FATHER'S OCCUPATION

Time of Termination	Occupational Category						
	Not Employed	2 (e.g. unskilled)	3	4	5	6 (e.g. professional)	Not Codeable
During Year 1	11 (3.94%)	49 (2.30%)	10 (1.82%)	23 (2.69%)	7 (1.46%)	8 (1.52%)	19 (3 .10%)
During Year 2	29 (10.39%)	233 (10.92%)	53 (9.64%)	83 (9.70%)	27 (5.61%)	30 (5.68%)	62 (10 .13%)
During Year 3	23 (8.24%)	187 (8.76%)	58 (10.55%)	62 (7.24%)	34 (7.07%)	30 (5.68%)	59 (9 .64%)
During Year 4	32 (11.47%)	215 (10.07%)	51 (9.27%)	80 (9.35%)	37 (7.69%)	31 (5.87%)	69 (11 .27%)
After Year 4	62 (22.22%)	561 (26.29%)	103 (18.73%)	164 (19.16%)	73 (15.18%)	79 (14.96%)	123 (20 .10%)
Still Enrolled in 5th year	122 (43.73%)	889 (41.66%)	275 (50.00%)	444 (51.87%)	305 (62.99%)	350 (66.29%)	280 (45 .75%)
TOTAL *	279 (99.99%)	2134 (100.00%)	550 (100.01%)	856 (100.01%)	481 (100.00%)	528 (100.00%)	612 (99 .99%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 16

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY, ANALYZED BY FATHER'S OCCUPATION

	Occupational Category						
Type of Credit	Not Employed	2 (e.g. unskilled)	3	4	5	6 (e.g. professional)	Not Codable
Basic Level Credits	3.97	4.12	2.79	2.01	0.58	0.66	4.49
General Level Credits	6.44	7.69	6.65	5.17	3.29	1.20	7.17
Advanced Level Credits	14.63	14.17	17.20	19.00	23.30	26.23	13.00
TOTAL CREDITS	25.68	26.52	26.96	26.42	27.30	28.11	25.25
NUMBER OF STUDENTS	184	1450	378	608	376	429	403

TABLE 17

NUMBER OF TORONTO SECONDARY SCHOOL STUDENTS TERMINATING YEARLY, ANALYZED BY MOTHER'S OCCUPATION

Time of Termination	Occupational Category						
	Not Employed	2 (e.g. unskilled)	3	4	5	6 (e.g. professional)	Not Codeable
During Year 1	51 (2.72%)	48 (2.45%)	19 (2.66%)	14 (2.36%)	6 (3.17%)	1 (0.83%)	29 (2.86%)
During Year 2	157 (8.38%)	218 (11.14%)	67 (9.40%)	45 (7.59%)	13 (6.88%)	4 3.33%)	11 9 (11.75%)
During Year 3	161 (8.60%)	161 (8.23%)	67 (9.40%)	48 (8.09%)	9 (4.76%)	12 (10.00%)	91 (8.98%)
During Year 4	208 (11.11%)	182 (9.30%)	62 (8.70%)	44 (7.42%)	22 (11.64%)	11 (9.17%)	11 (10.96%)
After Year 4	415 (22.16%)	501 (25.60%)	127 (17.81%)	94 (15.85%)	27 (14.29%)	16 (13.33%)	169 (16.68%)
Still Enrolled in 5th year	881 (47.04%)	847 (43.28%)	371 (52.03%)	348 (58.68%)	112 (59.26%)	76 (63.33%)	494 (48.77%)
TOTAL *	1873 (100.01%)	1957 (100.00%)	713 (100.00%)	593 (99.99%)	189 (100.00%)	120 (99.99%)	1013 (100.00%)

* - Percentages may not be exactly 100%, because of decimal rounding.

TABLE 18

AVERAGE NUMBER OF CREDITS EARNED BY STUDENTS
WHO HAVE COMPLETED AT LEAST 4 YEARS OF STUDY,
ANALYZED BY MOTHER'S OCCUPATION

	Occupational Category						
Type of Credit	Not Employed	2 (e.g. unskilled)	3	4	5	6 (e.g. professional)	Not Codable
Basic Level Credits	3.38	4.54	2.42	0.75	0.63	0.33	4.92
General Level Credits	5.89	7.16	4.98	3.87	1.88	1.08	6.55
Advanced Level Credits	16.61	14.33	18.33	21.69	23.42	25.41	15.13
TOTAL CREDITS	26.25	26.53	25.88	26.39	25.97	26.85	25.13
NUMBER OF STUDENTS	1296	1348	498	442	139	92	663

pensioners, welfare recipients, etc. while the column at the other end, "not codeable" includes data from respondents who did not clearly identify their parents' occupations or type of work and from respondents who did not indicate their parents' occupations at all.

Looking at the occupational categories, there is a clear pattern from 2 to 6 of increased retention. Students whose fathers are in occupational category 3 are much more likely to have terminated during the first four years than students whose fathers are in occupational category 6. The same pattern exists for mothers' occupations. For fathers in the case of both mothers and fathers, students who report their parents as coming from an occupational category that was coded as "not employed" have about the same likelihood of terminating early as those whose fathers came from occupational category 2 (unskilled).

In Tables 16 and 18 where we are looking at the pattern of credit accumulation, we see that as far as father's occupation is concerned, the average number of total credits is about 1 1/2 more for students whose father was in category 6 as it is for students whose father was in category 2.

With regard to mother's occupation, however, there is essentially no difference in the total number of credits accumulated as related to the occupational category of the mother. However, in both cases, we see a clear pattern with regard to the kind of credits accumulated. Students whose father is in one of the lower occupational categories, 2 especially, but also 3 or 4, are much more likely to have accumulated some

credits at the Basic level than those whose father is in the top two occupational categories. A similar pattern holds with regard to the mothers' occupational categories. However, here it only applies to categories 2 and 3. Category 4 looks like category 5.

With regard to Advanced level credits, there is a steady progression across the occupational categories from 14.2 average Advanced credits in category 2 to 28.1 Advanced credits in category 6. A similar pattern is observed with regard to mother's occupational categories, moving from an average number of Advanced credits of 14.3 (mother's occupational category 2) to 25.4 Advanced credits (mother's occupational category 6.)

SUMMARY

In 1980 the Grade Nine Student Survey was initiated. In the fall of 1984 data on this group of students was retrieved to find out whether or not they had terminated and if so, when and how many credits they had accumulated and at what level these credits were taken. This data was summarized to present the termination data in terms of whether or not the students had completed 1, 2, 3 or 4 years or whether they were still studying. The total number of credits accumulated was averaged for those students who had attended a Toronto secondary school for at least 4 years. These two pieces of information were examined in terms of the background characteristics which had been used in the analyses in Grade 9, i.e. immigrant status, mother tongue, race, family structure, and parents' occupations.

Information on the destination of students who had terminated tends to be limited. In some cases when the students had moved to another school, it was possible to so report. In other cases it was known that the student had entered the work force. In over half the terminations, however, the destination was not specified and in less than 10% of the cases was the destination specified as another school, or a move to another province or country. For this reason, data was analyzed for all terminations regardless of whether destination was specified.

The results in a few cases were not quite what was expected. This is because there was not always a direct relationship between the proportion of students who terminated and the total

number of credits accumulated. In addition, the pattern of credit accumulation for Basic, General and Advanced level credits also varied.

Early termination was most likely for students studying primarily Basic level courses. It was least likely for students taking Advanced level courses. Early termination was more likely for males than females; however females were less likely to stay on for a fifth year of study. Early termination was more likely for students who had attended a separate School rather than a Toronto elementary school. (See NOTE following Table 5 on page 14.) Among immigrants, whether or not English was their first language, early termination was most likely for those who had arrived recently, i.e. in the last three years. Students who came from a single parent family were more likely to terminate early than those who lived with both parents. Those who lived with a guardian or in a group home were more likely to terminate early than those in a single parent family. Students who were independent or on their own rarely completed more than a couple of years of study.

Students who identified themselves as White were more likely to terminate early than those students who identified themselves as Black. Students who identified themselves as Native Canadian were most likely to terminate early. Students who identified themselves as Black or Asian were least likely to terminate early.

Students whose parents' occupations were categorized in the lower categories, unskilled or semi-skilled, were more likely to terminate early than students whose parents' occupations were categorized in the higher categories, professional, managerial, etc. This is true for both mothers' occupations and fathers' occupations.

As noted, the pattern of credit accumulation had two components: total number of credits accumulated and number of Advanced level credits accumulated. Graduating with a Secondary School Graduation Diploma is not dependent upon the level of credits being accumulated. Although there are some restrictions on the type of credits required for the diploma, basically 27 credits is what is required. On the average, students taking Basic level and General level courses earned a little less than 24 credits. Those taking Advanced level credits earned 27.3. Looking at males and females, the females earned 26.9, males 25.5, we know from the Grade 9 study that females are more likely to be taking Advanced level courses. There was relatively little difference (half a credit) between those who had attended a Separate elementary school and those who had attended a public elementary school. Among the immigrants, we find that those who learned English or French as a second language tended to earn 27 credits (26.8 for those arriving before 1970) provided they were not among those who had arrived within the last three years. The group that had arrived as infants and very young children was slightly lower in its average at 26.8 credits. Among the immigrants with English and/or French as a first language

although no group earned 27 credits, the most recent arrivals earned the fewest. The other three groups varied between 25.2 and 26.4 credits.

Looking at family structure, we find by far the most credits earned by students who lived in homes where both parents were present (26.7). In single parent families and in group homes the students earned on the average three less credits. Among students who were independent, they earned half that many credits.

In the data analyzed by race, we find the South Asian students averaged 27.1 credits, the Asian students 26.6, the White and Native Canadian students 25.5 and the Black students 24.1.

In spite of the tremendous variation in termination rates among the students based on their parents occupational categories, there were relatively small variations in terms of the total number of credits accumulated by those who remained. In relation to father's occupation, the two categories where more than 27 credits were earned were those for the top two occupational categories. The other occupational categories averaged around 26.5, although the "not employed" category was lower. There was even less variation related to the mother's occupation.

In spite of the variations reported above in the number of credits accumulated, it is quite clear that a large number of students will not get their 27 credits for graduation until they complete their fifth year. Furthermore, the rate of termination

or early terminations are probably a continuing significant phenomenon. We recognize that of those students who had not terminated there are very different patterns as to whether or not they are accumulating a larger proportion of their credits at the Advanced level. The reader is reminded in conclusion that these averages conceal individual cases, situations and circumstances which lead to tremendous variations among the students. Although "variance" was not discussed, the reader should be aware that the standard deviations were generally very large reflecting this great variance.

APPENDIX A

Some Notes on the Sampling

Since the numbers of students in this report do not exactly match the numbers in the Grade 9 Student Survey, which population is being followed, an attempt will be made here to explain some of the variations.

The master list from which the Grade 9 Student Survey labels were drawn included every student who was in a Grade 9 home form. The exception to this was a school which arranges students according to a "house system"; for this school, labels for all students were prepared and the school administered it only to students taking Grade 9 English. Thus there are several hundred extra numbers in the original list.

Among the students that were reported in the 1980 Grade 9 Survey were students who insisted on being anonymous. Nonetheless, they could be included in many of the tables and this was done. These students, however, are completely lost in our attempts to follow through four years later.

Most students indicated whether or not they were taking their courses at the Advanced, Basic or General levels, so this table (Table 1) provides data on almost the complete original population of those who filled in a questionnaire. It excludes a few students who were recent arrivals in the system and who were still in English as a Second Language classes. These students however would be included in tables that used the questions of

year of arrival and first language spoken.

Missing data is not reported in any table because it is not possible to sort out the missing data from those who were not part of the original survey.

APPENDIX B

DESTINATIONS OF STUDENTS WHO HAVE TERMINATED, ANALYZED BY LEVEL AT WHICH THEY INITIALLY REPORTED TAKING MOST OF THEIR CREDITS

Destination	Initial Level of Study					
	Basic		General		Advanced	
	No.	% *	No.	% *	No.	% *
Work	267	(26.5%)	361	(27.2%)	216	(16.6%)
Higher Education	9	(0.9%)	95	(7.2%)	121	(9.3%)
Other Country	5	(0.5%)	6	(0.5%)	36	(2.8%)
Other Province	2	(0.2%)	2	(0.2%)	10	(0.8%)
Private School	1	(0.1%)	1	(0.1%)	21	(1.6%)
Treatment Facility	--	--	1	(0.1%)	2	(0.2%)
Non-Metro School	13	(1.3%)	27	(2.0%)	46	(3.5%)
Metro School	15	(1.5%)	52	(3.9%)	128	(9.8%)
TBE School	17	(1.7%)	19	(1.4%)	45	(3.5%)
Not Specified	677	(67.3%)	764	(57.5%)	674	(51.8%)
Sub Total (All Terminations)	1006	(100.0%)	1328	(100.0%)	1307	(99.9%)
Still Attending in 5th Year	282	(21.9%)**	590	(30.8%)**	2339	(64.2)**
TOTAL N	1288		1918		3640	

* - Percentage based on Sub Total.

** - Percentage based on Total.

NOTE: Students indicated as having transferred to another Toronto Board of Education school and who are also terminated did not have their file activated at the receiving school.

REFERENCES

Wright, E.N. and Dhanota, A.S. The grade nine student survey: fall 1980. Toronto: The Board of Education for the City of Toronto, Research Department (#161).